

Division of Solid and Hazardous Waste
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Solid Waste Facility Permit

Under the provisions of N.J.S.A. 13:1E-1 et seq. known as the Solid Waste Management Act, this permit is hereby issued to:

Ciba Specialty Chemicals Corporation

Facility Type: Class II Sanitary Landfill
Lot No.: 6 (Cell 3 only)
Block No.: 411
Municipality: Dover Township
County: Ocean
Facility Registration No.: 1507000673

This permit is subject to compliance with all conditions specified herein and all regulations promulgated by the Department of Environmental Protection.

This permit shall not prejudice any claim the State may have to riparian land, nor does it allow the permittee to fill or alter or allow to be filled or altered in any way, lands that are deemed to be riparian, wetlands, stream encroachment areas or flood plains, or that are within the Coastal Area Facility Review Act (CAFRA) zone or are subject to the Pinelands Protection Act of 1979, nor shall it allow the discharge of pollutants to waters of this State without prior acquisition of the necessary grants, permits, or approvals from the Department of Environmental Protection.

June 28, 2001
Date of Issuance

Signed by Thomas Sherman, Assistant Director
Thomas Sherman
Assistant Director
Office of Permitting &
Technical Programs

June 28, 2006
Expiration Date

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Scope of Permit

The permitted facility is a private solid waste landfill owned by Ciba Specialty Chemicals Corporation for the disposal of groundwater treatment sludge from its on-site groundwater treatment plant. The facility is located on Oak Ridge Parkway in Dover Township, Ocean County.

The Plant's groundwater treatment facility purifies landfill leachate and contaminated groundwater as part of the Plant's environmental remediation program. The on-site groundwater treatment process yields a non-hazardous sludge that requires disposal at the landfill.

The originally authorized landfill area comprised Cells 1, 2, 3 and 4. Cell 1 was capped in 1984. However, in accordance with the Administrative Consent Order (ACO) that Ciba Specialty entered into with the Department on 27 February 1992, a new capping system was installed on the top portion of Cell 1 during the spring of 1994. Additionally, in accordance with the aforementioned ACO, the sludge in Cell 2 was removed and transferred into Cell 3 during the fall of 1993. The Cell 2 area is currently undeveloped. Cell 3 is the only active cell at the above landfill. Cell 3 currently receives sludge from the on-site Groundwater Treatment Plant. During the summer of 1994, a temporary cover, as approved by the Department, was installed over approximately 85 percent of Cell 3 to reduce the leachate generation within the cell.

The Solid Waste Facility Permit is a permit renewal to the existing Permit that was last renewed on 1 November 1993. This Solid Waste Facility Permit also approves a transfer of ownership of the facility from Ciba-Geigy Corporation to Ciba Specialty Chemicals Corporation. The Solid Waste Facility Permit is being renewed for Cell 3 only of the currently authorized landfill.

This permit does not convey any property rights of any sort, or any exclusive privilege. Failure to comply with all of the conditions specified herein may result in revocation of this permit and/or may result in such other regulatory or legal actions that the Department is authorized by law to institute.

Section I

General Conditions Applicable to All Permits

1. Duty to Comply

- (a) Pursuant to N.J.A.C. 7:26-2.8(i), the permittee shall operate the facility in compliance with the requirements of N.J.A.C. 7:26-2.11.
- (b) Pursuant to N.J.A.C. 7:26-2.8(j), the permittee shall operate the facility in conformance with all of the conditions, restrictions, requirements and any other provisions set forth in this permit.
- (c) Pursuant to N.J.A.C. 7:26-2.8(k), except for minor modifications as set forth at N.J.A.C. 7:26-2.6(d), the permittee shall not modify, revise or otherwise change any condition of this permit without prior written approval of the Department.

2. Duty to Reapply

- (a) Pursuant to N.J.A.C. 7:26-2.7(b)1, if the permittee wishes to continue the operation of this facility after the expiration date of this permit, the permittee shall apply for permit renewal at least 90 days prior to the expiration date of this permit, and the facility must be included in the District Solid Waste Management Plan at the time of such application.
- (b) Pursuant to N.J.A.C. 7:26-2.7(c), the conditions of this permit shall continue in force beyond the expiration date of this permit pursuant to the Administrative Procedure Act, N.J.S.A. 52:14B-11, until the effective date of a new permit if:
 - 1. The permittee has submitted a timely and complete application for a renewal permit pursuant to (a) above; and
 - 2. The Department, through no fault of the permittee, does not issue a new permit with an effective date on or before the expiration date of this permit, due to time or resource constraints.
- (c) Pursuant to N.J.A.C. 7:26-2.7(d), permits continued under said section remain fully effective and enforceable, and if the permittee is not in compliance with any one of the conditions of the expiring or expired permit the Department may choose to do any or

all of the following:

1. Initiate enforcement action based on the permit, which has been continued;
2. Issue a notice of intent to deny the new permit under N.J.A.C. 7:26-2.4. If the permit is denied, the permittee would then be required to cease activities and operations authorized by the continued permit or be subject to an enforcement action for operating without a permit;
3. Issue a new permit under N.J.A.C. 7:26-2.4 with appropriate conditions; or
4. Take such other actions as are authorized by N.J.A.C. 7:26-1 et seq. or the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq.

3. Need to Mitigate

- (a) Pursuant to N.J.A.C. 7:26-2.8(p), should the Department determine that the facility is operating in an environmentally unsound manner, the permittee shall:
 1. Within 90 days of notification by the Department, submit a plan to close or environmentally upgrade the facility in conformance with the applicable standards, as determined by the Department and set forth in N.J.A.C. 7:26-1 et seq.;
 2. Within 90 days of receipt of written approval by the Department of the submitted plan, begin to close or construct the environmental upgrading at the facility; and
 3. Within one year of receipt of written approval by the Department of the submitted plan, complete closure or construction of the environmental upgrading at the facility.
- (b) Pursuant to N.J.A.C. 7:26-2.8(q), a one time extension of the compliance schedule established by N.J.A.C. 7:26-2.8(p) shall be granted by the Department provided the permittee demonstrates that it has made good faith effort to meet the schedule.
- (c) Pursuant to N.J.A.C. 7:26-2.8(r), should the environmental upgrading required pursuant to N.J.A.C. 7:26-2.8(p) not be completed or should continued operations be determined by the Department to be

environmentally unsound despite the implementation of the plan approved pursuant to N.J.A.C. 7:26-2.8(p), the facility shall temporarily or permanently cease operations and close or enter into receivership, as provided for in N.J.S.A. 13:1E-9, for that period of time necessary to rectify the environmentally unsound conditions.

4. Permit Actions

- (a) Pursuant to N.J.A.C. 7:26-2.6(a)1, if cause exists, the Department may modify, or revoke and reissue this permit, subject to the limitations of that section, and may require the permittee to submit an updated or new application in accordance with N.J.A.C. 7:26-2.6(e), if appropriate.
- (b) Pursuant to N.J.A.C. 7:26-2.6(b), the Department may modify or, alternatively, revoke and reissue this permit if cause exists for termination under N.J.A.C. 7:26-2.6(c) and the Department determines that modification or revocation and reissuance is appropriate.
- (c) Pursuant to N.J.A.C. 7:26-2.6(d), upon the request of the permittee, an interested party or for good cause, the Department may make certain minor modifications to a permit without issuing a tentative approval, providing public notice thereof or holding a public hearing thereon.
- (d) Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, the permittee shall promptly submit such facts or information.

5. Signatory Requirements

- (a) All completed registration statements submitted by the permittee shall be signed as specified at N.J.A.C. 7:26-2.4(e)1.
- (b) All engineering designs and reports, the environmental and health impact statement, other information requested as "Addendums" by the Department pursuant to N.J.A.C. 7:26-2.4(f) and (g)4 and documents required to be submitted pursuant to N.J.A.C. 7:26-2.9 and 2.10, submitted on behalf of the permittee, shall be signed by a person described in N.J.A.C. 7:26-2.4(e)1 or by a duly authorized representative of that person, as specified at N.J.A.C. 7:26-2.4(e)2.

- (c) Any person signing a registration statement, engineering design or report, environmental and health impact statement or addendum mentioned in N.J.A.C. 7:26-2.4(e)1 or (e)2, submitted on behalf of the permittee, shall make the certification specified at N.J.A.C. 7:26-2.4(e)3.

6. Transfers

- (a) Pursuant to N.J.A.C. 7:26-2.8(1), the permittee shall not transfer ownership of the permit without receiving prior written approval of the Department, in accordance with N.J.A.C. 7:26-2.7(e).
- (b) Pursuant to N.J.A.C. 7:26-2.7(e)1, a written request for permission to allow any transfer of ownership or operational control of the facility must be received by the Department at least 180 days in advance of the proposed transfer. The request for approval shall include the following:
 - 1. A registration statement completed by the prospective new permittee on forms provided by the Department;
 - 2. A disclosure statement as required by N.J.A.C. 7:26-16.4 completed by the proposed transferee; and
 - 3. A written agreement between the permittee and the proposed new permittee containing a specific future date for transfer of ownership or operations.
- (c) Pursuant to N.J.A.C. 7:26-2.7(e)2, a new owner or operator may commence operations at the facility only after the existing permit has been revoked and a permit is issued pursuant to N.J.A.C. 7:26-2.4.
- (d) Pursuant to N.J.A.C. 7:26-2.7(e)3, the permittee of record remains liable for ensuring compliance with all conditions of the permit unless and until the existing permit is revoked and a new permit is issued in the name of the new owner or operator.
- (e) Pursuant to N.J.A.C. 7:26-2.7(e)4, compliance with the transfer requirements set forth in that subsection shall not relieve the permittee from the separate responsibility of providing notice of such transfer pursuant to the requirements of any other statutory or regulatory provision.

7. Registration Statement

- (a) Pursuant to N.J.A.C. 7:26-2.8(b), prior to May 1 of each calendar year the permittee shall submit to the Department a statement updating the information contained in the permittee's initial registration statement. This update shall be on forms furnished by the Department. In no case shall submission of an updated statement alter conditions of this permit.
- (b) Pursuant to N.J.A.C. 7:26-2.8(c), the permittee shall notify the Department in writing within 30 days of any change in the information set forth in the permittee's current registration statement.
- (c) Pursuant to N.J.A.C. 7:26-2.8(d), failure of the permittee to submit an updated registration statement and to submit all applicable fees, required by N.J.A.C. 7:26-4, on or before July 1 of each calendar year shall be sufficient cause for the Department to revoke this permit or take such other enforcement action as is appropriate.

8. Duty to Update Disclosure Statement

Regulations established at N.J.A.C. 7:26-16.6(b) and N.J.A.C. 7:26-16.6(c) are not applicable since the permittee is the operator of the facility.

9. Operating Record and Reporting Requirements

- (a) The permittee shall maintain a daily record of wastes received. The record shall include the information specified at N.J.A.C. 7:26-2.13(a).
- (b) The daily record shall be maintained, shall be kept, and shall be available for inspection in accordance with N.J.A.C. 7:26-2.13(b).
- (c) The permittee shall submit monthly summaries of wastes received to the Division of Solid and Hazardous Waste, Bureau of Recycling and Planning and the Solid Waste Coordinator for the District where the facility is located, on forms provided by the Department (or duplicates of same), no later than 20 days after the last day of each month. The monthly summaries shall include the information specified at N.J.A.C. 7:26-2.13(e).

10. Conformance to the District Solid Waste Management Plan

Pursuant to N.J.A.C. 7:26-6.12(b), the permittee shall operate the facility in compliance with any applicable district solid waste management plan(s) as well as any amendments to and/or approved administrative actions concerning such plan(s). Should the permittee fail to comply with any applicable district solid waste management plan(s) as well as any amendment to or approved administrative actions concerning such plan(s), the permittee shall be deemed in violation of N.J.S.A. 13:1E-1 et seq. and N.J.A.C. 7:26-1 et seq. and shall be subject to applicable penalties provided thereunder, and any other applicable laws or regulations.

11. Compliance with Other State Regulations and Statutes

Pursuant to N.J.A.C. 7:26-2.8(h), the issuance of this permit shall not exempt the permittee from obtaining all other permits or approvals required by law or regulations.

End of Section I

Section II

General Operating Requirements

1. General Operating Requirements for All Solid Waste Facilities

Pursuant to N.J.A.C. 7:26-2.11, the facility must be operated in compliance with the following general operating requirements:

- (a) Within each 24-hour period the operator shall clean each area where waste has been deposited or stored.
- (b) No waste shall be stored overnight at the facility without effective treatment to prevent odors associated with putrefaction.
- (c) Facility property surrounding the actual disposal area shall be maintained free of litter, debris, and accumulations of unprocessed waste, process residues and effluents. Methods of effectively controlling wind-blown papers and other lightweight materials such as fencing shall be implemented at the facility.
- (d) Methods of effectively controlling dust shall be implemented at the facility in order to prevent offsite migration.
- (e) The operation of the facility shall not result in air contaminants to be emitted in violation of N.J.A.C. 7:27-5.2(a).
- (f) The operator shall maintain all facility systems and related appurtenances in a manner that facilitates proper operation and minimizes system downtime. When requested, the operator of the facility shall furnish proof that provisions have been made for the repair and replacement of equipment that becomes inoperative.
- (g) An adequate water supply and adequate fire-fighting equipment shall be maintained at the facility or be readily available to extinguish any and all types of fires. Fire-fighting procedures as delineated in the approved O and M manual, including the telephone numbers of local fire, police, ambulance and hospital facilities, shall be posted in and around the facility at all times.

- (h) The operator shall effectively control insects, other arthropods and rodents at the facility by means of a program in compliance with the requirements of the New Jersey Pesticide Control Code, N.J.A.C. 7:30, and implemented by an applicator of pesticides, certified in accordance with the New Jersey Pesticide Control Code, N.J.A.C. 7:30.
- (i) The operator shall at all times comply with the conditions of the SWF permit, as well as all other permits or certificates required and issued by the Department or any other governmental agency. The operator shall not receive, store, handle, process or dispose of waste types not specifically identified in the SWF permit or other permit or certificate issued by the Department.
- (j) The operator shall maintain a record of the quantity of each authorized waste type accepted for disposal, in accordance with N.J.A.C. 7:26-2.13 and 3.2.
- (k) Departmental inspectors shall have the right to enter and inspect any building or other portion of the facility, at any time. This right to inspect includes, but is not limited to:
 - 1. Sampling any materials on site;
 - 2. Photographing any portion of the facility;
 - 3. Investigating an actual or suspected source of pollution of the environment;
 - 4. Ascertaining compliance or non-compliance with any statutes, rules, or regulations of the Department, including conditions of the SWF permit or other permit or certificate issued by the Department; or
 - 5. Reviewing and copying all applicable records, which shall be furnished upon request and made available at all reasonable times for inspection.
- (l) The quantity of waste received by the facility operator shall not exceed the system's designed handling, storage, processing or disposal capacity as identified in the SWF permit or other permit certificate. The designed processing and disposal capacity approved within the solid waste facility permit, or any other permit certificate or approval conditions as a ton per day operational maximum shall be inclusive of all solid waste received at the facility as well as all tonnages

of source separated recyclables received.

- (m) The facility shall be operated in a manner that employs the use of the equipment and those techniques for the receipt, storage, handling, processing or disposal of incoming waste and process residues that are specifically authorized by the SWF permit.
- (n) The operator shall provide a means of removing mud, solid waste or other debris from the tires of all vehicles. Vehicle tires shall be cleaned prior to the vehicle's departure from the facility's boundaries.
- (o) The approved final O and M manual shall be maintained at the facility. A written description of any proposed changes to the approved, final O and M manual shall be submitted to the Department for review. These proposed changes should not be implemented at the facility until the Department approves the changes.

2. General Operating Requirements for Class II Sanitary Landfills

All Class II sanitary landfills shall be operated in accordance with the requirements set forth in N.J.A.C. 7:26-2.8, and the following additional operational, maintenance, inspection and monitoring requirements set forth in N.J.A.C. 7:26-2A.8.

The sanitary landfill shall be operated in accordance with the following additional minimum requirements:

(a) Working Face

- 1. All waste shall be thoroughly compacted throughout the operational day to yield the smallest practical volume;
- 2. Solid waste shall be compacted in shallow layers. The layers should be less than two feet in thickness and should be compacted with a minimum of four passes of the compaction equipment. Sanitary landfill equipment shall be prohibited from operating over leachate collection pipes until a minimum of five feet of refuse has been mounded over and around the pipe;
- 3. The lift height of the daily cell, as measured vertically from the previous day's cover surface, shall not exceed 12 feet;

4. The slope of the working face shall be maintained so as to maximize compaction of the solid waste and minimize infiltration into the solid waste. The slope shall be no steeper than three horizontals to one vertical (3:1).

(b) Intermediate and Final Cover

1. Intermediate cover, a minimum of 12 inches of cover material, shall be applied to all surfaces to be exposed for any period exceeding 24 hours (Please refer to Section III, Condition 5(a) of this permit);
2. The grade and thickness of the final cover material on all surfaces shall be maintained until stabilized. All cracks, erosion swales, rills and uneven areas shall be maintained to prevent extrusion of solid waste and to minimize infiltration and ponded water;
3. All areas shall be graded so as to facilitate drainage of run-off to the surface drainage system and minimize infiltration and ponded water;
4. Heavy clays and very fine grain materials, such as fly ash, shall not be used as daily and intermediate cover. The daily and intermediate cover material should be of a quality that is manageable under all weather conditions. A sufficient quantity of cover material shall be at the site to adequately meet the requirements of (b)1 and (b)2 above. For landfills without on-site supplies of cover material, a standby supply for cover material equal to 25 percent of the volume of waste received and compacted at the landfill in 10 normal disposal days shall be stored within the boundaries of the landfill property;
5. Final cover constructed in accordance with N.J.A.C. 7:26-2A.7(i) shall be applied to all surfaces where the final approved elevation has been reached and to all surfaces when the landfill operation is terminated;
6. There shall be sufficient types of quantities of equipment for digging, spreading, compacting or covering waste or applying cover material to adequately meet the requirements of (b)1 through 4

above, to ensure a smooth flow of traffic at the working face and to achieve the maximum compaction efficiencies;

7. Sanitary landfill equipment shall be equipped with hand-portable fire extinguishers of a multipurpose dry chemical type, an automatic fire suppression system, and rollover protection structures and any other safety equipment required by the Occupational Health and Safety Administration standards; and
8. In case of breakdown of the equipment required by (b)6 above, the permittee shall repair the equipment or obtain replacement equipment within 24 hours after breakdown. Unless sufficient types and quantities of replacement equipment meeting the requirements of (b)6 above are available on-site, written maintenance contracts with a local equipment dealer shall be in force at all times. A copy of the contract shall be submitted with the O and M Manual to verify compliance with this requirement.

(c) Access

1. Access to the sanitary landfill for solid waste disposal shall be permitted only during the operating hours set by the Division of Solid and Hazardous Waste Management and shall be restricted to 7:00 A.M. to 7:00 P.M. in areas within 1000 feet of a residential zone; and
2. The sanitary landfill shall have an entrance gate that can be locked to prevent unauthorized entry into the facility.

(d) Housekeeping

1. Dust control shall be effected by the spraying of water or the spreading of calcium chloride or an equivalent approved by the Department, as needed. Spraying of waste oil is prohibited;
2. The sanitary landfill shall not cause any air contaminant to be emitted in violation of N.J.A.C. 7:27-5.2(a). Malodorous emissions shall be controlled by the use of daily cover. In the event that this is not satisfactory, a suitable deodorant shall be used. Malodorous solid waste shall be covered immediately after unloading with

a minimum of six inches of cover material or approved alternative material;

3. The sanitary landfill shall be operated in a manner which minimizes the propagation and harborage of insects, rodents, and birds;
4. The sanitary landfill shall be operated in a manner that will protect all monitoring devices and environmental systems from damage. Any damage shall be immediately reported to the Department hot line 1(877) WARNDP;
5. Any monitoring device or environmental control system which is damaged so as to impair the proper operation of the monitoring device or environmental control system shall be reconstructed in accordance with the following:
 - i. The operator shall repair the monitoring device or environmental system in accordance with the plans and schedule approved by the Department; and
 - ii. The Department may require immediate remedial action for repair of the damaged monitoring device or environmental control system should such damage endanger human health or the environment.
6. The sanitary landfill shall be operated in a manner which will facilitate the filling of each section to final grade and which will minimize the operational phase of each section, and
7. An all weather road shall be provided to the working face.

(e) Facility Staffing

1. An adequate number of qualified personnel shall be at the sanitary landfill to maintain the smooth flow of traffic at the sanitary landfill and to operate the sanitary landfill in a manner that is in compliance with the requirements of the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., N.J.A.C. 7:26, and the conditions of this SWF permit; and
2. A supervisor shall be at the sanitary landfill during all operating hours to ensure proper

operation of the sanitary landfill, to evaluate the monitoring data and inspection reports, to determine the performance of the sanitary landfill and to direct and implement all operational decisions to ensure the facility's compliance with the requirements of the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., N.J.A.C. 7:26, and the conditions of this SWF permit.

(f) Facility Personnel Training

1. All sanitary landfill personnel who are involved in waste management activities or who operate, service or monitor any facility equipment, machinery or system, shall complete a program of on-the-job training which shall include, at a minimum, the following:
 - i. The training program shall be directed by a person thoroughly familiar with the technology being utilized at the facility and the conditions of this SWF permit;
 - ii. The training shall include instruction in the operation and maintenance of the equipment, machinery and systems which facility personnel must operate service or monitor in the course of their daily job duties. The training shall instruct facility personnel in the performance of their duties in a manner that ensures the facility's compliance with the requirements of the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., N.J.A.C. 7:26, and the conditions of this SWF permit;
 - iii. The training program shall ensure that the facility personnel are able to effectively respond to any equipment malfunction or emergency situation that may arise;
 - iv. The training program shall provide instruction in the use of safety and emergency equipment and the use of communication or alarm systems; and
 - v. The training program shall provide instruction in the procedures for emergency response for sanitary landfill fires or explosions, gas leaks, leachate treatment system failure or leaks, detention basin

breaches or other emergencies and shall include procedures to shut down operations.

2. The sanitary landfill facility personnel shall complete the initial training program required by (g)1 above within six months after the date of their employment;
3. The sanitary landfill facility personnel shall take part in an annual update of the initial training program; and
4. Training records that document the type and amount of training received by current facility personnel shall be kept until closure of the sanitary landfill.

(g) Emergency Actions

1. The following actions shall be implemented in the case of an emergency:
 - i. The supervisor or emergency coordinator shall immediately identify the character, exact source, amount and extent of any discharged materials and notify appropriate State or local agencies with designated response roles if their help is needed;
 - ii. Concurrently, the supervisor or emergency coordinator shall assess possible hazards to public health or the environment that may result from the discharge, fire or explosion. This assessment shall consider both direct and indirect effects;
 - iii. If the supervisor or emergency coordinator determines that the facility has had an uncontrolled discharge, a discharge above standard levels permitted by the Department, or a fire or explosion, he or she shall:
 - (1) Immediately notify appropriate local authorities if the assessment indicates that evacuation of local areas may be advisable;
 - (2) Immediately notify the Department at 1(877) WARNDP; and
 - (3) When notifying the Department, report

the type of substance and the estimated quantity discharged, if known, the location of the discharge, actions the person reporting the discharge is currently taking or proposing to take in order to mitigate the discharge and any other information concerning the incident which the Department may request at the time of notification.

- iv. The supervisor shall take all reasonable measures to ensure that fires, explosion and discharges do not recur or spread to other areas of the facility. These measure shall include, where applicable, the cessation of operations and the collection and containment of released waste;
- v. Immediately after an emergency, the supervisor or emergency coordinator shall provide for treating, storing or disposing of waste, contaminated soil or water or any other material contaminated as a result of the discharge, fire or explosion;
- vi. The supervisor or emergency coordinator shall ensure that no waste is processed until cleanup procedures are completed and all emergency equipment listed in the contingency plan is again fit for its intended use;
- vii. The supervisor or emergency coordinate shall notify the Department and appropriate local authorities when operations in the affected area of the facility have returned to normal; and
- viii. Within 15 days after the incident, the supervisor or emergency coordinator shall submit a written report on the incident to the Department. The report shall include, but not be limited to:
 - (1) The name, address, and telephone number of the facility;
 - (2) The date, time and description of the incident;
 - (3) The extent of injuries, if applicable, with names and responsibilities

indicated;

- (4) An assessment of actual damage to the environment, if applicable;
- (5) An assessment of the scope and magnitude of the incident;
- (6) A description of the immediate actions that have been initiated to clean up the affected area and prevent a recurrence of a similar incident; and
- (7) An implementation schedule for undertaking longer term measures to effect cleanup and avoid recurrence of the incident, if applicable.

(h) On-Site Baseline

- 1. An on-site baseline consisting of two vertical and horizontal control monuments shall be constructed and installed in accordance with the Map Filing Law, N.J.S.A. 46:23-9.9 et seq., and the Department's specifications in the "Guidelines for Establishing Vertical and Horizontal Control Monuments on Sanitary Landfills" available from the Division of Solid Waste Management, Office of Permitting and Technical Programs;
- 2. The control monuments shall be installed with, at a minimum, second Order accuracy in accordance with the "Classification, Standards of Accuracy, and General Specifications of Geodetic Control Survey", published by the U.S. Department of Commerce, 1980; and
- 3. The control monuments shall be tied into the national or state geodetic survey network and keyed into the North American Datum of 1983.

(i) Fire Fighting

Control of smoking, smoldering or burning landfills shall be in accordance with the following:

- 1. In case of a fire on an active sanitary landfill, the responsibility for fire control shall lie with the SWF permit holder;
- 2. The owner or operator of any landfill wherein

smoldering, smoking or burning is occurring shall immediately notify the local police and fire department having jurisdiction and the Department hot line 1(877) WARNDP;

3. The owner or operator of any active landfill shall be responsible for initiating and continuing fire-fighting actions until all smoldering, smoking and burning ceases;
4. The owner or operator of any landfill shall seek and obtain fire-fighting assistance if smoldering, smoking or burning persists for longer than 24 hours;
5. The owner or operator of any landfill shall not conduct disposal activities within the burning area. Precautions shall be taken to prevent disposal activities from interfering with fire-fighting activities; and
6. Any disruption of the finished grade or covered surface shall be repaired and recovered upon completion of fire-fighting activities.

3. General Maintenance and Inspection Requirements for Class II Sanitary Landfills

- (a) While the sanitary landfill is in operation all environmental control systems shall be maintained in a proper functioning manner and shall be inspected to ensure compliance with the operational and construction/requirements and the design and performance standards.
- (b) The inspections, required by (a) above, shall be performed, unless otherwise stated, on a weekly basis and after storm events to detect evidence or deterioration, malfunction or improper operation.
- (c) The owner and/or operator shall record the results of the inspections in a log book or by means of an electronic records storage system approved by the Department which shall be maintained at the sanitary landfill office and be accessible, at all times, for inspection by the Department. These records shall include the date and time of the inspection, the name of the inspector, a notation of observations and recommendations and the date and nature of any repairs or other remedial action.

- (d) If deterioration which would result in failure, malfunction or improper operation is evident during inspection, the operator shall make repairs in accordance with Condition 2(d)5 of Section II entitled "General Operating Requirements for Class II Sanitary Landfills" and as listed in the approved final O and M Manual.
- (e) The sanitary landfill shall be maintained and inspected by the owner and/or operator in accordance with the following additional minimum requirements:
 - 1. The all weather road shall be maintained as necessary to provide access to the working face;
 - 2. The vertical and horizontal control monuments shall be maintained and resurveyed by a licensed New Jersey Land Surveyor and certified for accuracy biennially. The survey shall be, at a minimum; second order accuracy in accordance with the "Classification Standards of Accuracy, and General Specifications of Geodetic Control Survey" published by the U.S. Department of Commerce 1980. The control monuments shall be tied into the national or state geodetic survey network;
 - 3. All emergency equipment shall be maintained in a proper functioning manner. The equipment shall be tested on an annual basis;
 - 4. The leachate collection pipes shall be maintained to ensure a free flow of leachate. The leachate collection pipes shall be inspected and if blockage and clogging of the system is evident the collection pipes shall be cleared by water jet flushing or an equivalent method. The mains shall be tested annually to ensure a free flow of leachate;
 - 5. The structural integrity of the manholes or clean-out risers shall be maintained to ensure a free flow of leachate;
 - 6. The structural integrity of the sumps shall be maintained to ensure water tightness of the sump;
 - 7. The structural integrity of the leachate pump station and the electrical, venting and alarm systems of the leachate pump station shall be maintained to ensure a free flow of leachate;

8. The leachate pumping system shall be maintained as necessary. It shall be completely overhauled, at a minimum, on a biennial basis and shall be inspected on a daily basis to ensure a free flow of leachate;
9. The leachate treatment and disposal systems shall be inspected on a daily basis and maintained in a manner that will prevent anaerobic and malodorous conditions from developing;
10. The structural integrity of the wetwells shall be maintained to ensure containment of leachate. The wetwells shall be inspected annually for leaks;
11. The structural integrity and erosion protection shall be maintained on all areas of the surface impoundments to ensure stability of the dike and emergency spillways and containment of the leachate and run-off. The surface impoundment shall be inspected on a daily basis to ensure that the minimum depth of freeboard is maintained;
12. The leachate treatment and disposal system units, surface impoundments, and detention/retention ponds shall be dredged, as necessary, to maintain the design capacity. Dredging shall not result in or cause damage to the containment system;
13. The structural integrity of all monitoring devices shall be maintained to ensure their workability and reliability; and
14. The structural integrity and erosion protection of the surface run-on/run-off structures shall be maintained on all areas of the capping system to ensure the stability of the slope and prevent excess erosion. The top grades shall be maintained at their proper slopes to minimize ponding.

4. General Monitoring Requirements for Class II Sanitary Landfills

Monitoring shall be performed in accordance with the following parameters and schedules:

- (a) Sampling and analysis of water from the groundwater monitoring wells shall be performed in accordance with the NJPDES regulations, N.J.A.C. 7:14A;

- (b) Sampling and analysis of surface water taken from the surface water monitoring locations shall be performed in accordance with N.J.A.C. 7:14A;
- (c) Leachate monitoring of the influent and effluent of the treatment and disposal system shall be performed in accordance with the appropriate section of the NJPDES regulations at N.J.A.C. 7:14A;
- (d) In addition to the requirement of 4(c) above, the flow of leachate in the primary and secondary leachate collection and detection systems shall be recorded on a daily basis;
- (e) The daily leachate monitoring results shall be compiled on a quarterly basis and submitted to the Division;
- (f) The daily precipitation data from the meteorologic monitoring system shall be compiled and submitted on a quarterly basis to the Division;
- (g) The Permittee shall submit an annual topographic survey of all areas of the sanitary landfill. The topographic survey shall be made between January 20 and March 31 of each year and submitted on or before May 1 of each year in accordance with N.J.A.C. 7:26-2A.8(i).

End of Section II

Section III

Specific Conditions Applicable to the Facility

1. Permitted Waste Type

The permittee is authorized to accept the following waste type:

<u>ID</u>	<u>DESCRIPTION</u>
27	Dry industrial waste (groundwater treatment sludge generated from Ciba Specialty Chemicals Corporation's on-site groundwater treatment plant)

The permittee is not authorized to accept any other type or description of solid waste as defined at N.J.A.C. 7:26-2.13(g) and (h), regulated medical waste as defined at N.J.A.C. 7:26-3A.6(a), or hazardous waste as defined at N.J.A.C. 7:26-G(5).

2. Approved Designs, Plans and Reports

(a) The permittee shall operate the facility, and construct or install associated appurtenances thereto, in accordance with the provisions of N.J.A.C. 7:26-1 et seq., the conditions of this permit, and the following permit application documents which are incorporated herein by reference:

1. "Solid Waste Facility Permit Renewal Application for Industrial Waste Landfill" dated 29 July 1998 prepared by John Tucker, Groundwater Remediation Manager of Ciba Specialty Chemicals Corporation.
2. Addendum to the Closure and Post-Closure Plan dated February 1998 prepared by Eckenfelder Inc.
3. Closure and Post-Closure Plan revised December 1995 prepared by Eckenfelder Inc.
4. Operation and Maintenance Manual dated December 1995 for Cells 3 and 4.
5. Cell 3 Closure Development Report dated March 1994, revised August 1994 prepared by Eckenfelder Inc.
6. Cell 3 documents comprising engineering plans entitled "Ciba-Geigy Corporation Toms River Plant,

Cells Nos. 3&4 Permit Drawings" prepared by Brian D. Gillan, PE, Signed and sealed by Robert D. Mutch, PE License Number 23346 and Engineering Design and Operation Report, Appendices A to I, prepared by Aware, Inc., submitted on 13 July 1987.

- (b) In case of conflict, the provisions N.J.A.C. 7:26-1 et seq. shall have precedence over the conditions of this permit, the conditions of this permit shall have precedence over the SWF permit application documents listed above, and the most recent revisions and supplemental information approved by the Department shall prevail over prior submittals and designs.
- (c) One complete set of the permit application documents listed in Condition 2(a) above, this Solid Waste Facility Permit, and all records, reports and plans as may be required pursuant to this permit shall be kept on-site and shall be available for inspection by authorized representatives of the Department upon presentation of credentials.

3. Approved Operations

(a) Landfill Service Capacity

The areal extent of the landfill shall be approximately 21 acres. The landfill's approved cells consist of Cells 1, 2, 3 and 4. However, The Solid Waste Facility Permit is being renewed for Cell 3 only, which shall be approximately 3.2 acres. Additional cells shall receive engineering design approval from the Department prior to construction.

Final elevation, including the final cover, shall not exceed elevation 80.5 feet above mean sea level for the entire landfill. All sideslopes shall be constructed as specified on the referenced engineering plans.

(b) Hours of Operation

The permittee shall accept waste at the facility in accordance with the following schedule:

Waste Acceptance:

Monday through Friday: 7:00 a.m. to 7:00 p.m.

4. Construction Requirements

- (a) The final cover for Cell 3 shall consist of the

following capping system from top to bottom:

- 6 inches of topsoil and 12 inches of soil to support vegetative growth and proper run-off;
- Geotextile to provide separation between sand layer and soil layer;
- 18-inch sand layer (to provide drainage for rainfall that infiltrates) with a minimum permeability of 1×10^{-3} cm/sec;
- A geogrid to enhance the stability of the sideslopes;
- Geosynthetic drainage layer consisting of two non-woven geotextiles installed on both sides of the geonet for conveying flow;
- 30-mil PVC geomembrane;
- 12 inches of compacted clay with a maximum hydraulic conductivity of 1×10^{-7} cm/sec or geosynthetic clay layer (bentonite) to provide a low permeability backup to the geomembrane layer;
- 30-mil reinforced chlorosulfonated polyethylene (RCSPE) membrane (this layer of the temporary cover system may either remain in-place with final cover placement above, or be removed prior to final cover installation);
- 12 inches of sand to serve as cushion layer for the overlying geosynthetics; and
- Geotextile to provide separation between waste and sand layer.

Final cover, as defined herein, shall be applied after solid waste placement has reached final elevations in the remaining active area of this cell.

(b) Construction Quality Assurance/Quality Control (QA/QC)

1. A quality assurance inspector, independent of the quality control inspector, approved by the Department and reporting directly to the Department, shall be at the site at all times

during the initial construction phase of the containment and leachate collection systems to observe and perform all required systems audits of the quality control inspections, as set forth at 2, 3 and 4 below, to insure proper implementation of the design and permit requirements. For the purposes of this section, quality control assurance means the periodic testing and observations performed by the owner and/or operator of a landfill as a check on the construction contractor's quality control activities.

2. A meeting shall be held between the quality assurance inspectors and the Department to establish reporting procedures and frequency, in accordance with the construction scheduling.
3. Quality control inspectors shall be at the site during all phases of construction to ensure and verify that the approved sanitary landfill design and SWF permit landfill construction requirements are properly implemented.
4. The quality control inspectors shall, at a minimum, be at the site at all times during the construction of the containment and leachate collection systems. For the purposes of this section, quality control means those activities are responsibilities assigned to the construction contractor, manufacturer, installer or supplier to measure and regulate the characteristics or properties of an item in order to ensure that the applicable landfill construction requirements at N.J.A.C. 7:26-2A.7 and the SWF permit conditions are met. This includes those actions taken before, during, or after construction to ensure that the materials used and the completed workmanship are in conformance with the construction requirements at N.J.A.C. 7:26-2A.7 and the SWF permit.
5. The quality control measures and tests required by N.J.A.C. 7:26-2A.7 and described in the QA and QC plan submitted in accordance with N.J.A.C. 7:26-2A.5(a)7 shall be employed to ensure that the construction requirements are properly implemented and that the design and performance standards are achieved.
6. The scheduled frequency of inspections by the

independent quality assurance inspectors may be reduced or discontinued if approved by the Department. The reductions or discontinuance shall be based on the results of the initial construction tests and the precision and consistency of the quality control test results.

7. At such time as the independent quality assurance inspector is discontinued, as approved by the Department, the activities performed by the quality assurance inspector shall be carried out by the permittee's quality control inspectors in accordance with the approved Quality Assurance and Quality Control Plan.
8. The Department may reinstate the independent quality assurance inspection at the site if the results of the construction tests and the precision and consistency of the quality control testing warrant such reinstatement.
9. Best available engineering construction practices shall be employed for all phases of the facility construction.

(c) As-Built Certification

1. A New Jersey licensed professional civil or geotechnical engineer shall certify, in writing, to the Department that he or she has supervised the inspection of the construction of each major phase of the sanitary landfill's construction. He or she shall further certify that each phase has been prepared and constructed in accordance with the engineering design approved by the Department, prior to operations. The certification shall include a final documentation report which shall summarize the daily quality control of construction activities as required by N.J.A.C. 7:26-2A.7(a)14 and shall include as-built drawings.
2. A New Jersey licensed professional civil or geotechnical engineer shall certify that the materials utilized in the containment system and leachate collection system are in conformance with and meet the specifications of the approved engineering design.
3. There shall be no deviation made from the approved engineering design specification without the prior

written approval of the design engineer and, at a minimum, prior verbal approval by the Department.

4. All certifications shall bear the raised seal of the licensed professional engineer, his signature, and the date of certification.
5. The certification shall include the following: "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals under my supervision, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. I understand that, in addition to criminal penalties, I may be liable for a civil administrative penalty pursuant to N.J.A.C. 7:26-5 and that submitting false information may be grounds for denial, revocation or termination of any solid waste facility permit for which I may be seeking approval or now hold."

5. Special Conditions

(a) Daily and Intermediate Cover

Should any odors and/or vectors be noticed at the landfill, a daily and intermediate cover shall immediately be applied to control odors and/or vectors. In the event that this is not satisfactory, then a recognized company in this field shall be employed to eliminate the problem.

The daily and intermediate (except for all exterior side slopes) cover requirements have been waived at this facility due to the following reasons: 1) the sludge does not provide a support medium for vectors due to the low percentage of active organics presence; 2) the sludge does not contain litter, and 3) the sludge has not been prone to odor problems and the distance of the landfill from the surrounding communities reduces any potential impact.

Intermediate cover, a minimum of 12 inches of cover material, shall be applied to all exterior side slopes to be exposed for any period exceeding 24 hours.

(b) Methane Gas Monitoring

Methane gas monitoring is not required at this facility.

(c) Submission Schedule for Monitoring

The following information shall be submitted to: Chief, Bureau of Landfill & Recycling Management, Division of Solid and Hazardous Waste, PO Box 414, Trenton, New Jersey 08625-0414:

<u>Document</u>	<u>Frequency</u>	<u>Due Date</u>
Leachate monitoring results (quantity)	quarterly	April, July October & January
Daily precipitation Summary	quarterly	April, July October & January
Topographic survey	annually	before May 1

END OF SECTION III